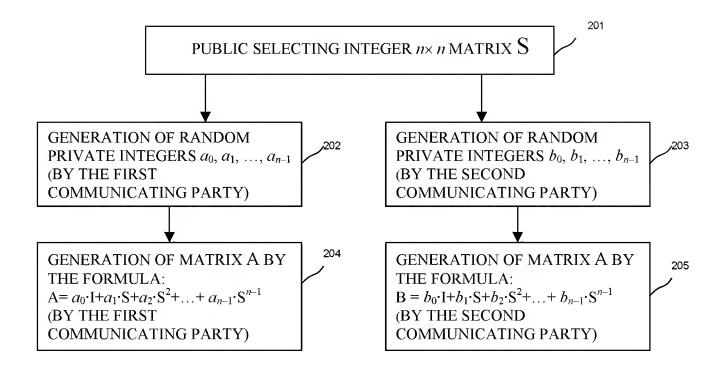


FIG. 1



**FIG. 2.** COMMUTING *n*× *n* MATRICES GENERATOR

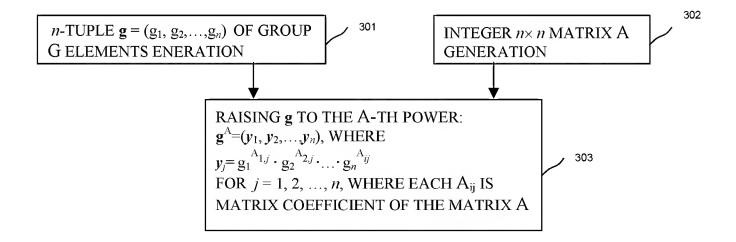


FIG. 3. TUPLE-MATRIX EXPONENTIATOR

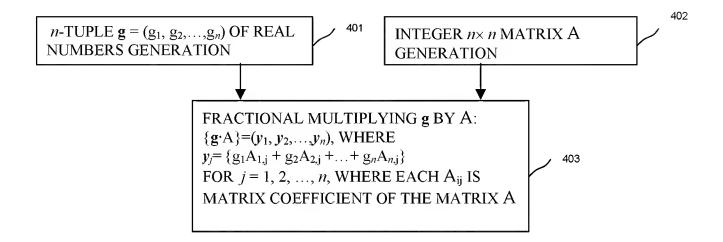


FIG. 4. TUPLE-MATRIX FRACTIONAL MULTIPLIER

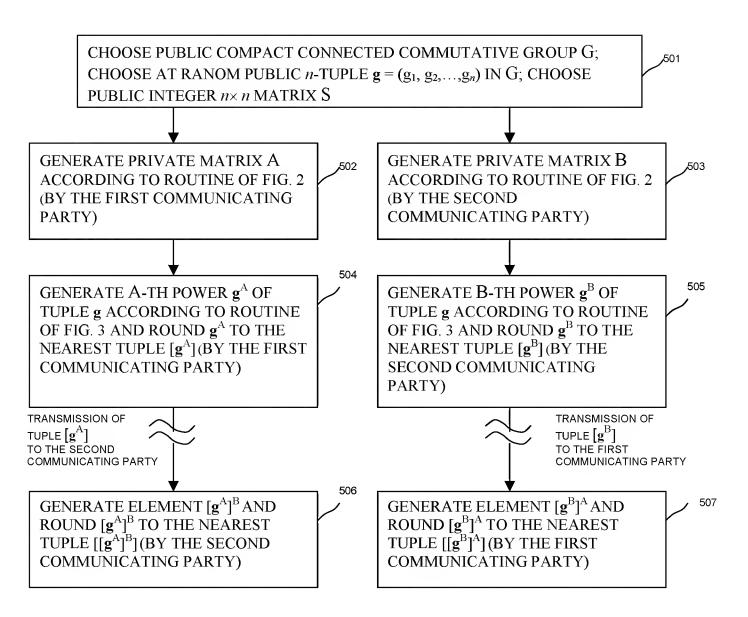


FIG. 5. n-DIMENSIONAL KEY GENERATOR

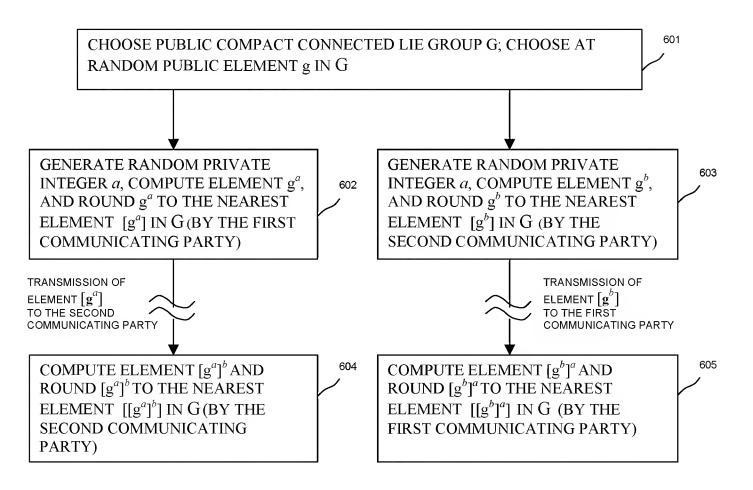


FIG. 6. ONE-DIMENSIONAL KEY GENERATOR

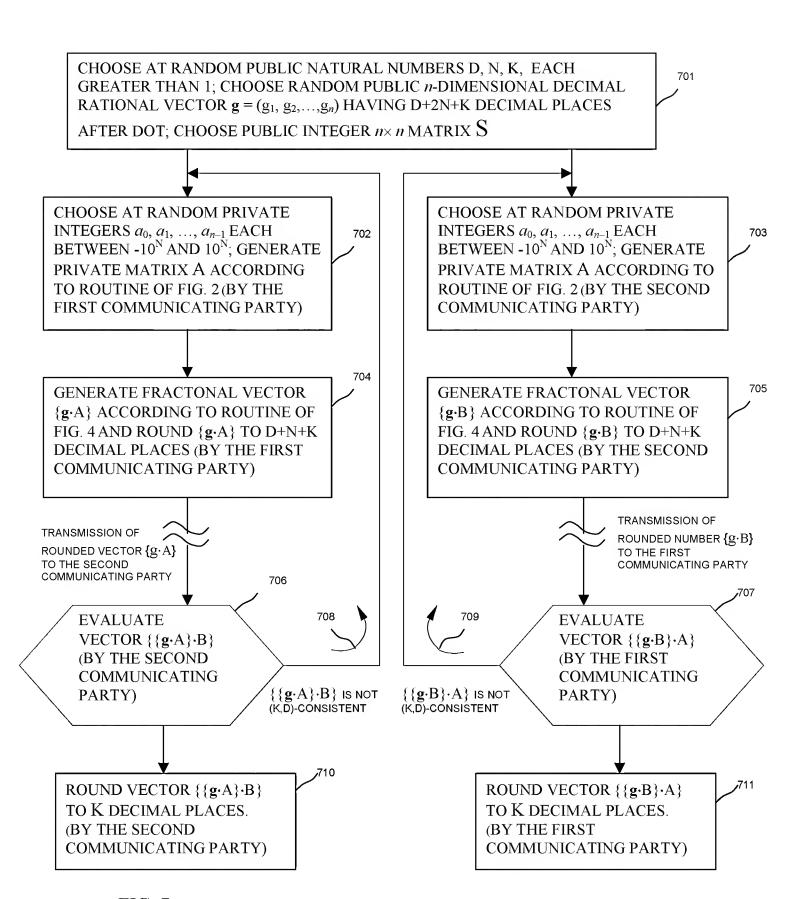


FIG. 7. *n*-DIMENSIONAL FRACTIONAL KEY GENERATOR

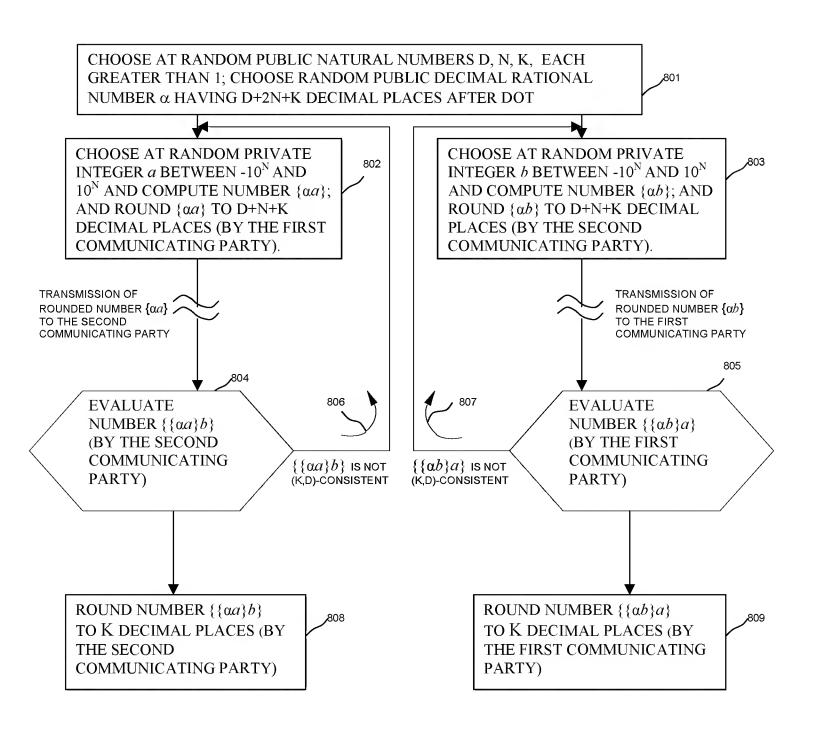


FIG. 8. ONE-DIMENSIONAL FRACTIONAL KEY GENERATOR